REMARKS

The foregoing amendment amends Claim 18 to clarify the invention. Claims 1-37 are currently pending in the application. For the reasons set forth below, Applicant believes that the rejections should be withdrawn and that the claims are in condition for allowance.

OBJECTION TO DRAWINGS

The Examiner objected to Figures 1-5 for not being labeled as prior art. As mentioned above, Figures 1-5 have been amended to add a "Prior Art" label to each figure. Accordingly, the objection to the drawings should be withdrawn.

REJECTION OF CLAIMS 18-22 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 18, 19 and 22 under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior art ("AAPA") described in the Background Art section of the specification and illustrated in Figures 1-5. The Examiner rejected Claims 20 and 21 under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of U.S. Patent No. 6,477,360 to Wantanabe *et al.* ("Wantanabe"). As discussed below, these rejections are respectfully traversed.

Claim 18

Claim 18 as amended clarifies that the transceiver includes a resistor that generates a voltage in accordance with a direct current obtained by rectifying with the variable capacitance diode the transmission signal inputted to the resonance circuit and that is connected with the variable capacitance diode in parallel to apply the voltage across the anode and the cathode of the variable capacitance diode. According to one embodiment, as illustrated in Figure 20, the resistor 205 is connected to the variable capacitance diode 204 in parallel to apply the voltage across the anode and the cathode of the variable capacitance diode 204.

Relying on Figure 3 of the application the Examiner alleged that the AAPA discloses a transceiver that includes "a resistor 691 that generates a voltage in accordance with a direct

current obtained by rectifying with the variable capacitance diode 671 the transmission signal inputted to the resonance circuit and applies the voltage across the anode and the cathode of the variable capacitance diode 671 (see Figs. 1, 3 and [0003]-[0004] and [0009]-[0010], wherein one skilled in the art would recognize that control signal 611 for adjustment of resonance frequency would obviously perform claimed limitations)." *See*, Office Action, pg. 3, ln. 20 – pg. 4, ln. 5.

Using Figures 1-5 to describe the teachings of AAPA, a variable reactance 601 is applied to the variable reactance section 136 in the electric field communication transceiver of Figure 2. As noted by the Examiner, the electrical capacitance of the variable reactance 601 (or the variable capacitance diode 671) is varied by a control signal 111 inputted from the control signal generation section 143, thereby enabling adjustment of a resonance frequency. However, to accomplish that, the electric field communication transceiver of Figure 2 requires the amplitude monitor section 142 and the control signal generation section 143 to adjust a reactance value to a best-suited or substantially best-suited value. If an electric field communication transceiver is provided with an amplitude monitor section and a control signal generation section, the circuit dimension becomes larger and the power consumption may be increased (*see* [0010]), which is costly and inconvenient in terms of integrating the transceiver into a wearable computer.

In order to solve this problem, according to one embodiment illustrated in Figure 16, an electric field communication transceiver 15 is provided with a self-adjusting variable reactance section 52 (*see also* Figs. 17, 20 and 23) instead of the variable reactance section 601 of Figure 3. The transceiver defined by amended Claim 18 includes a self-adjusting variable reactance section.

According to one embodiment, as illustrated in Figure 20, a resonance circuit is provided with an inductor 203 for causing resonance in a transmission signal for the communication and a variable capacitance diode 204 of which electrostatic capacitance varies in accordance with a voltage applied thereto, and a resistor 205 that generates a voltage in accordance with a direct current obtained by rectifying with the variable

capacitance diode 204 the transmission signal inputted to the resonance circuit and that is connected with the variable capacitance diode 204 in parallel to apply the voltage across the anode and the cathode of the variable capacitance diode 204. Based on the defined configuration, a transceiver of the present invention does not require an amplitude monitor section and a control signal generation section, thereby downsizing the transceiver in comparison with the transceivers of AAPA. AAPA does not describe or suggest how to solve the above-described problem. The transceivers of AAPA cannot achieve the benefits of the present invention.

AAPA does not teach or suggest a transceiver that includes a resistor that generates a voltage in accordance with a direct current obtained by rectifying with the variable capacitance diode the transmission signal inputted to the resonance circuit and that is connected with the variable capacitance diode in parallel to apply the voltage across the anode and the cathode of the variable capacitance diode, as required by amended Claim 18. The current Office Action does not cite to any particular elements of AAPA as disclosing the resistor defined by amended Claim 18. Claim 18 would not have been obvious to a person of ordinary skill in the art at the time of the invention in light of AAPA. Accordingly, Claim 18 is not obvious in view of AAPA. Claim 18 is patentable over AAPA.

Claims 19-22

Claims 19-22 depend from Claim 18. Accordingly, for at least the same reasons discussed above, Claims 19-22 are patentable over AAPA.

Moreover, with regard to Claims 20 and 21, none of the figures and corresponding sections of Wantanabe, cited by the Examiner, describe or suggest a resistor that generates a voltage in accordance with a direct current obtained by rectifying with the variable capacitance diode the transmission signal inputted to the resonance circuit and that is connected with the variable capacitance diode in parallel to apply the voltage across the anode and the cathode of the variable capacitance diode, as required by amended Claim 18. Accordingly, Claims 20 and 21 are patentable over AAPA and Wantanabe.

ALLOWABLE SUBJECT MATTER

The Office Action indicated that Claims 1-17 and 27-37 are allowed and that Claims 23-26 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

On February 23, 2009 the undersigned contacted the Examiner to clarify the status of Claims 23-26, noting that Claim 23 is in independent format and Claims 24-26 depend from independent Claim 23. The Examiner stated that Claims 23-26 are allowed and that the Office Action erroneously stated that Claims 23-26 were objected to.

CONCLUSION

The foregoing is submitted as a complete response to the Office Action identified above. The application should now be in condition for allowance, and the Applicants solicit a notice to that effect. If there are any issues that can be resolved via a telephone conference, the Examiner is invited to contact the undersigned at 404.532.6946. The Commissioner is authorized to charge any additional fees that may be due or credit any overpayment to Deposit Account No. 11-0855.

Respectfully submitted,

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